



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,325	09/28/2001	Mark Sullivan	NIOC 7772	3172
321	7590	11/16/2005	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			LEVITAN, DMITRY	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,325

Applicant(s)

SULLIVAN, MARK

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Amendment, filed 10/24/05, has been entered. Claims 1-7 remain pending.

Claim Objections

1. In light of Applicant's amendment, the objections to the claims have been withdrawn.

Claim Rejections - 35 USC § 112

2. In light of Applicant's amendment, the rejection of claim 7 under 112 second paragraph has been withdrawn.

Claim Rejections - 35 USC § 103

3. Claims 1, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toporek (US 6,584,083) in view of Haldeman (US 6,801,576).

Toporek substantially teaches the limitations of claims 1, 4 and 6:

A satellite uplink for use in connection with a system transmitting media content from first location to a second location (uplink of the satellite system shown on Fig. 1 and 5:6-18, interconnecting two satellite gateways 111A and 111B, operating as central gateways for other gateways to connect them through the satellite link 5:54-60), including a satellite communication link having a transmission propagation delay (satellite links with significant latency 2:38-43, wherein each satellite hop can have latency from 200 ms to 700 ms 10:58-11:2), a communication satellite (satellite on Fig. 1 and 2, 5:6-14),

An encoder encoding media content into a first format at the first location (inherently part of client computer 123 on Fig. 1, because encoding application programs run on the computer, as described on 1:47-67, into TCP/IP packets, disclosed on 5:28-36, is essential for the system operation), said format is being sensitive to the transmission propagation delay and requiring at

Art Unit: 2662

least one transmission acknowledgement signal (TCP format problems with long latency typical for satellite link, including the protocol acknowledgements 4:27-44), the satellite uplink comprising:

A control processor (inherently part of satellite gateway 111A, because all gateways have processors) receiving media content in the first format and providing the at least one transmission acknowledgement signal to the encoder (satellite gateway 203 as shown on Fig. 2, receiving TCP/IP packets from client 201, including the protocol acknowledgements 4:27-44), said control processor converting the media content to a second format having a characteristic such that the second format is insensitive to the transmission propagation delay (converting the packets into a satellite protocol in translation module 231, the protocol designed to operate in long latency environment 10:58-11:2);

A satellite communication signal converter receiving the media content in the second format, said satellite communication converter converting the media content received in the second format to a satellite transmission signal compatible with the satellite communication link (inherently part of the satellite gateway 203, because physical layer 237 of satellite gateway 203 on Fig. 2, converting satellite protocol 233 into a signal for transmission to and from the satellite in a wireless medium 239 10:4-22); and

A satellite uplink transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite over the satellite communication link (inherently part of ground station 107 on Fig. 1 and 5:12-18, because the ground station is in communication with satellite 101 over the satellite link 105) wherein the satellite downlinks the satellite

transmission signal for the reception on the earth at the second location (ground station 108 on Fig. 1 and 5:4-18).

Also Toporek teaches transmitted media that includes graphics, text, sound, animation and real time communications 1:42-67.

Toporek does not teach media content as live media webcasting.

Haldeman teaches live media webcasting (live studio broadcasting distributed through a satellite 172 link and Internet to users 141, shown on Fig. 1 and 3:27-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add live media webcasting of Haldeman to the system of Toporek adding an important feature to the system, utilizing the system tolerance to the satellite latency, and making live broadcast available to remote users.

In addition, regarding claim 4, Toporek teaches an uplink router (satellite gateway 111A integrated in a router 6:13-15) comprising a satellite transceiver (satellite ground station comprising a satellite modem 5:14-18, as the satellite modem is integrated with a satellite gateway 6:13-15).

4. Regarding claims 2 and 3 Toporek teaches the first format utilizes a TCP protocol having a first propagation delay tolerance less than the propagation delay of the satellite link (using TCP protocol 213 and 229 as shown on Fig. 2 , wherein TCP delay tolerance is less than typical of satellite links 2:34-50) and wherein the satellite link acts as a TCP endpoint such that second format (conversion from TCP format into a satellite format, wherein satellite gateway is the satellite link endpoint as shown on Fig. 2), comprises modified TCP protocol having a second

Art Unit: 2662

propagation delay tolerance in excess of the propagation delay is insensitive to the delay (modified TCP format suitable for satellite long latency, for example 200-700 ms 10:58-11:6).

5. Regarding claim 5, Toporek teaches an earth station in communication with satellite (satellite ground station 108 on Fig. 1, comprising satellite gateway 6:13-15), receiving the satellite transmission signal and converting it into a third digital webcast signal having the first digital webcast format (translation module 249 converting the satellite signal into a third signal having the first digital webcast format TCP on Fig. 2 and 10:23-36); and

A router receiving the third digital webcast signal and routing the third digital webcast signal to a wide area network (satellite gateway 205 integrated in a router 6:13-14, routing TCP packets to an Internet as shown on Fig. 1 and 2, 10:30-45, wherein 129 and 259 is Internet).

6. Regarding claim 7, Toporek teaches implementation of the method of claim 6 as computer executable instructions in a personal computer 6:3-12.

Response to Arguments

7. Applicant's arguments filed 10/24/05 have been fully considered but they are not persuasive.

On page 9 of the Response, Applicant argues that Toporek teaches away from the present invention because not all information is converted to a propagation delay insensitive format.

Examiner respectfully disagrees.

The cited portion of Toporek discloses specific embodiments 12:10-13:7 in addition to the system utilizing a propagation delay insensitive format. Examiner did not base his rejection on the cited specific embodiments.

On page 10 of the Response, Applicant argues that Haldeman teaches away from the claimed invention.

Examiner respectfully disagrees.

Examiner based his rejection on the portion of Haldeman that teaches live media webcasting, clearly shown on Fig. 1 as item 171 LIVE FROM STUDIO. The other portions of Haldeman teaching are irrelevant, because Examiner did not use them in the rejection.

On page 11 of the Response, Applicant argues that there is no motivation to combine Toporek and Haldeman teachings.

Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Toporek substantially teaches the limitations of claims 1-7 (see the rejection above) as using a propagation delay insensitive format for the satellite transmission. Haldeman teaches live media webcasting through a satellite. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add live media webcasting of Haldeman to the

Art Unit: 2662

system of Toporek adding an important feature to the system, utilizing the system tolerance to the satellite latency, and making live broadcast available to remote users.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner.
11/04/05.



JOHN PEZZLO
PRIMARY EXAMINER